

ABSTRACT

[0036] The invention is directed to a device for calibrating an optical  
5 detection channel for a two-dimensional, spatially dependent measurement of  
fluorescent or luminescent radiation in multi-specimen carriers. The object of the  
invention, to find a novel possibility for calibrating an optical detection channel for a  
two-dimensional, spatially dependent measurement of fluorescent or luminescent  
radiation in multi-specimen carriers permitting a highly accurate calibration of the  
10 spatial sensitivity distribution of the sensor array in the detection channel which is  
economical, can be repeated at any time and can be adapted to the intensity level of  
the measurement task, is met according to the invention by providing a plate-shaped  
housing which is manufactured in the shape and size of the multi-specimen carriers  
under examination and has, on its side facing the detection channel, a large-area  
15 rectangular window whose size is adapted to the surface of the multi-specimen  
carrier under examination, which surface is provided with wells, and there is a  
luminescent foil inside the housing which is arranged parallel to the window so as to  
cover its surface, and a power source and control units are provided in the housing  
for controlling the luminescent foil, so that the luminescent foil can be controlled for  
20 homogeneous emission of luminescent light through the window of the housing in  
different intensity levels.